



a Siebe company

Installation of the Barber-Colman Electric Governor, DYNC-10500, on the Hercules G-2300 and G-3400 Naturally Aspirated, Natural Gas Engines. The Carburetor is an Impco CA 200. The G-2300 flywheel has 126 teeth and the G-3400 has 112 teeth. **CAUTION: Overspeed protection is recommended. When the electric governor is installed, remove the mechanical governor linkage rod.**

*Read all instructions and review the layout drawing before attempting this installation.*

## I. Installation Instructions

1. Remove the carburetor. Rotate the butterfly section only 180°. This leaves the air inlet in the original position. Remove the carburetor and throttle lever and install a rod end bearing — Item 9, on the lever as shown in the layout drawing.

2. With the carburetor butterfly closed, reinstall the throttle lever on the inboard side of the car shaft and in the position shown on the layout drawing. When the actuator is energized, its shaft will extend to push the throttle lever toward the front of the engine, increasing fuel. Visually verify correct rotation of throttle. Reinstall carburetor.

3. Install the Item 3 plate bracket and actuator using the specified screws, washers and nuts.

4. Install Item 3 — M6 nut, and clevis — Item 12, on the actuator shaft.

5. Refer to Item 10 description for linkage rod instructions.

### Wiring

A typical wiring diagram is included. The controller, Item 2, is to be panel mounted. The actuator and D.C. power leads should be 14 ga.

The negative D.C. power lead of the controller should be connected to the negative battery terminal or to where the large battery negative cable connects to the engine block. This is recommended because this is an ignition type engine.

### Linkage

When the linkage is installed, verify that when the actuator shaft is manually moved to full stroke (extended), the carburetor butterfly should be approximately 10° short of full open.

## II. Parts List

### A. Table 1. Governor Assembly

Specify voltage when ordering Items 1 and 2

Item	Description	Barber-Colman Part Number	Qty.
1	Governor actuator	DYNC-10500	1
2	Controller	DYN1-10724	1*

\* For remote speed and/or parallel operation, see controller listed in Table 3, Optional Parts.

### B. Table 2. Installation Kit

B-C Part Number DYNK-10296

Item	Description	Barber-Colman Part Number	Qty.
3	Actuator mounting bracket	DYNK-32-23	1
4	Plate screws 7/16 - 14 x 1" Hex	BYRF-1375	2
5	Lock washers 7/16	W1-71	2
6	Act. mount screws 1/4 - 28 x 1" Hex	BYRF-1346	6
7	Lock washers 1/4"	CYRD-558	6
8	Nuts 1/4 - 28	DYRF-110	8
9	Rod end bearings	DYNZ-47-1	2
10	Linkage rod 1/4 - 28 x 16" long Cut to correct length - See Note **	GYRF-42-13	1
11	Flat washers 1/4	CYRD-59	2
12	Clevis — Install Item 13 first	DYNK-218-1	1
13	M6 Nut - Clevis jam nut	N1-1	1
14	Magnetic pickup 3/8 - 24 thread (Use Item 15 bushing if needed)	DYNT-17200	1
15	Pickup bushing 5/8 - 18 to 3/8 - 24	DYNC-600-3	1
16	Wire lugs - Mate to lugs on actuator	E24-866-1	2

\*\* Approximate rod length for G-3400: 14 inches

Approximate rod length for G-2300: 9 inches

Install last. Position carburetor butterfly in closed position, and carburetor lever in "Off" position as shown in layout drawing. Measure required rod length. Cut Item 10 rod and install.

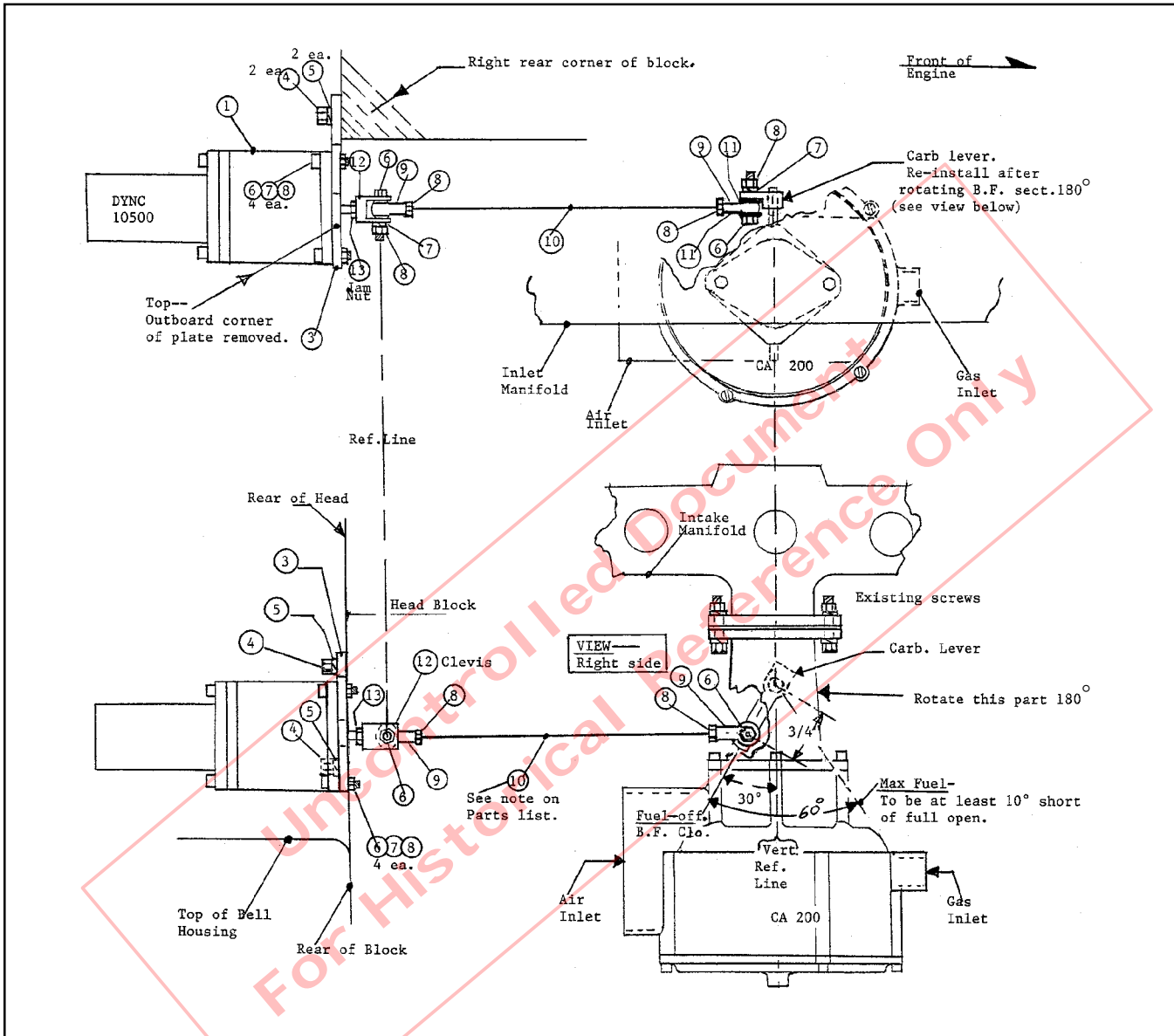
### C. Table 3. Optional Parts

Item	Description	Barber-Colman Part Number	Qty.
17	Controller for remote speed and/or parallel operation	DYN1-10754	1
18	Remote speed pot. 5K - 10 turn	DYNS-10000	1
19	3 Wire foil shielded cable	E26-22	***
20	D.C. power switch, toggle type	CYZP-11-1	1
21	Electronic overspeed switch	DYNZ-60010	1

\*\*\* Specify length

# Layout Drawings

**View  
Above - Right Side**



**CAUTION**

As a safety measure, the engine should be equipped with an independent overspeed shutdown device in the event of failure which may render the governor inoperative.

**NOTE**

Barber-Colman believes that all information provided herein is correct and reliable and reserves the right to update at any time. Barber-Colman does not assume any responsibility for its use unless otherwise expressly undertaken.

